

**ABSTRACT**

- 5                   The invention is directed to a process for multilayer coating of  
substrates which comprises
- a)               applying a filler layer of a filler coating composition to a substrate,
  - b)               curing the resultant filler layer by irradiation with high energy  
radiation and
  - 10    c)           applying a top coat layer to the cured filler layer and curing the top  
coat layer,
- whereby the filler coating composition comprises
- A)           at least one binder capable of free-radical polymerization having  
fewer than three olefinic double bonds per molecule,
  - 15    B)           at least one ester of alpha,beta-olefinically unsaturated  
monocarboxylic acids capable of free-radical polymerization having  
one olefinic double bond per molecule and
  - C)           at least one compound having at least one phosphoric acid group.

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